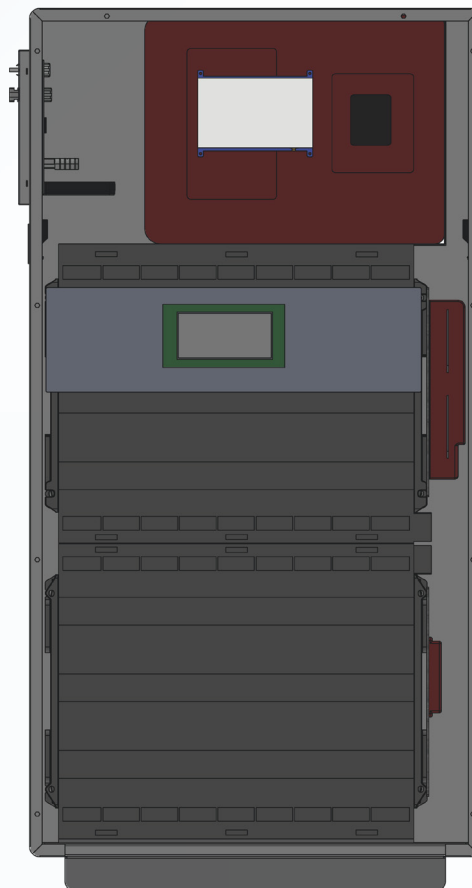




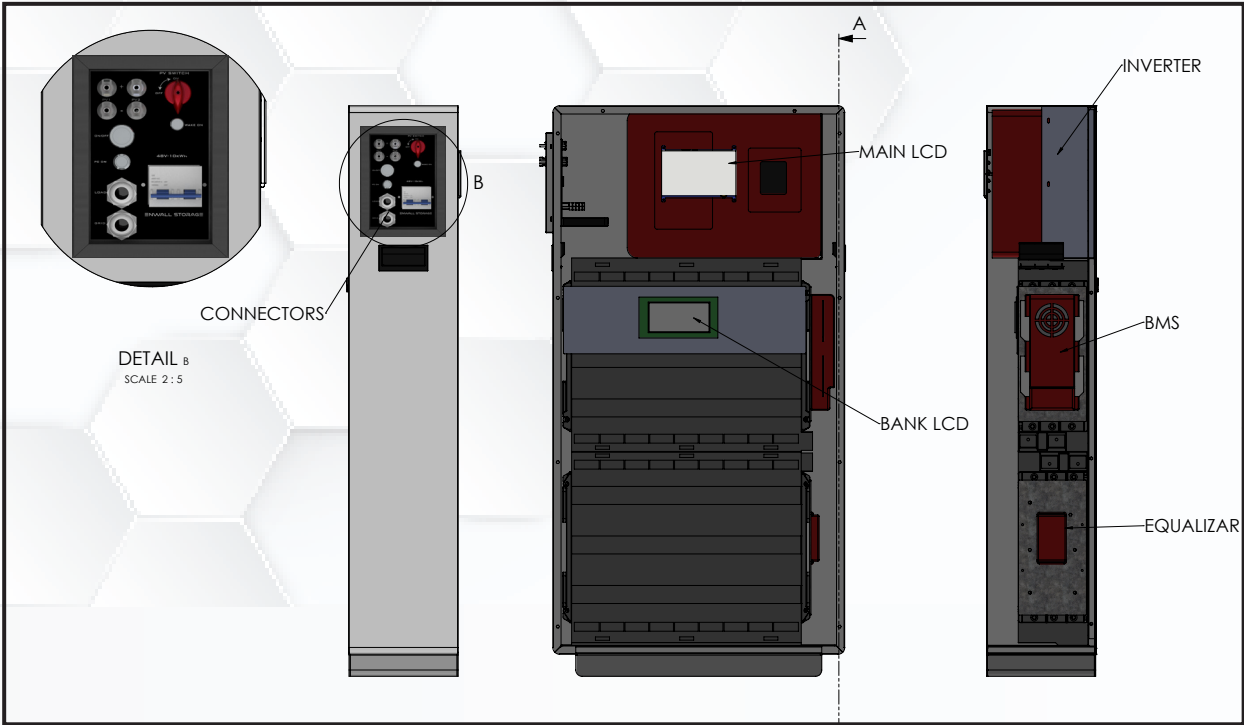
ENWALL  
TECHNICAL DATA SHEET  
ENW-10k-48-5k-X-X-X-X-1V0-GEN1  
VERSION 1.0 | REVISION 0  
RELEASE DATE: 22 JANUARY 2024

## INTRODUCTION:

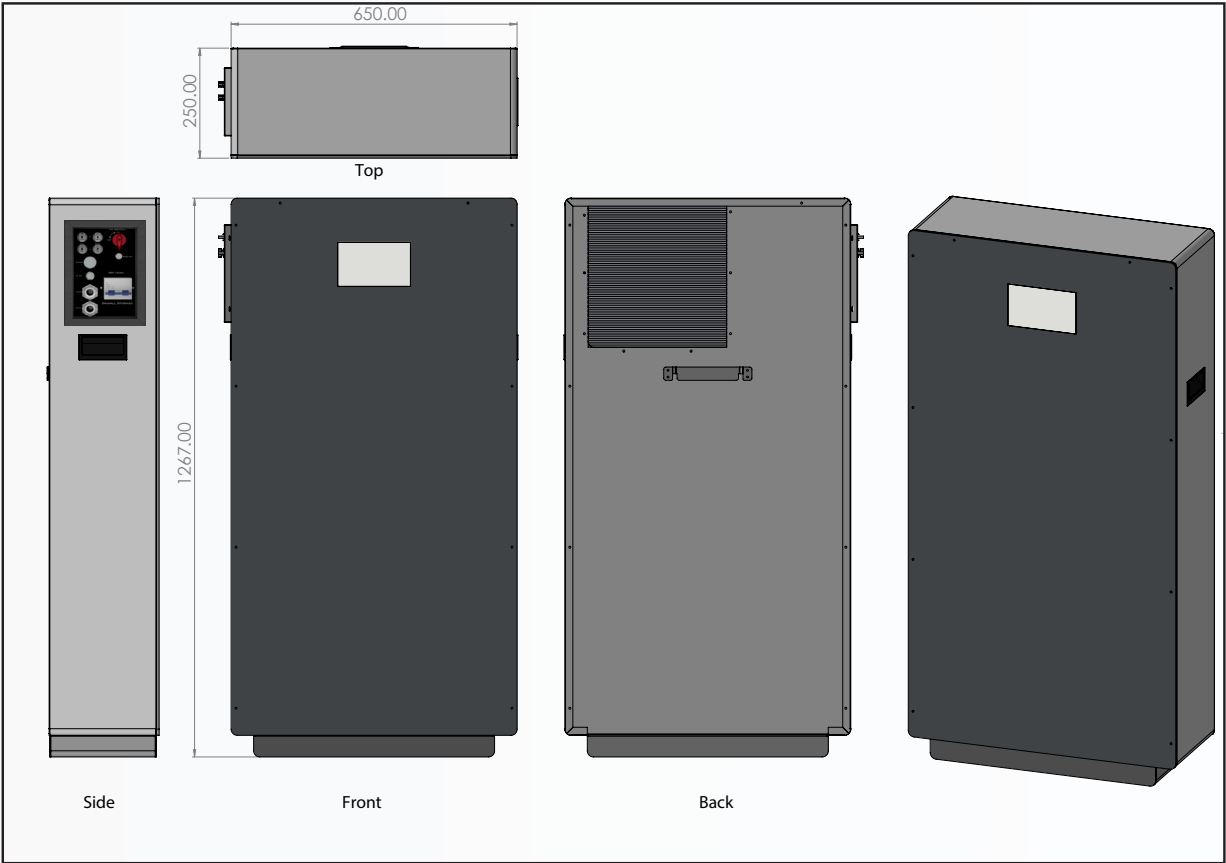
ENWALL is Enercap's latest integrated energy storage system designed for the home and light commercial facilities. ENWALL comes with Enercap's patent ENCAP and ENSERVER cutting-edge technology. The ENWALL system can be charged by the grid, solar, wind, or genset in either standalone, standalone grid-tied, standalone off-grid, grid-tied hybrid, or off-grid hybrid mode. It can switch automatically between modes as the need arises. Using the safest energy storage technology, the system can operate in very high or low temperatures without the need for heating or cooling and has a very high AC and DC round trip efficiency. ENWALL has a direct connection to PV, the Grid, Wind, or GENSETS. The system will automatically detect outages, can power your home or electric vehicle, and will charge as soon as any of the inputs is available. ENWALL will store energy for long periods without depletion of energy through idle discharge or thermal runaway of energy through idle discharge or thermal runaway.

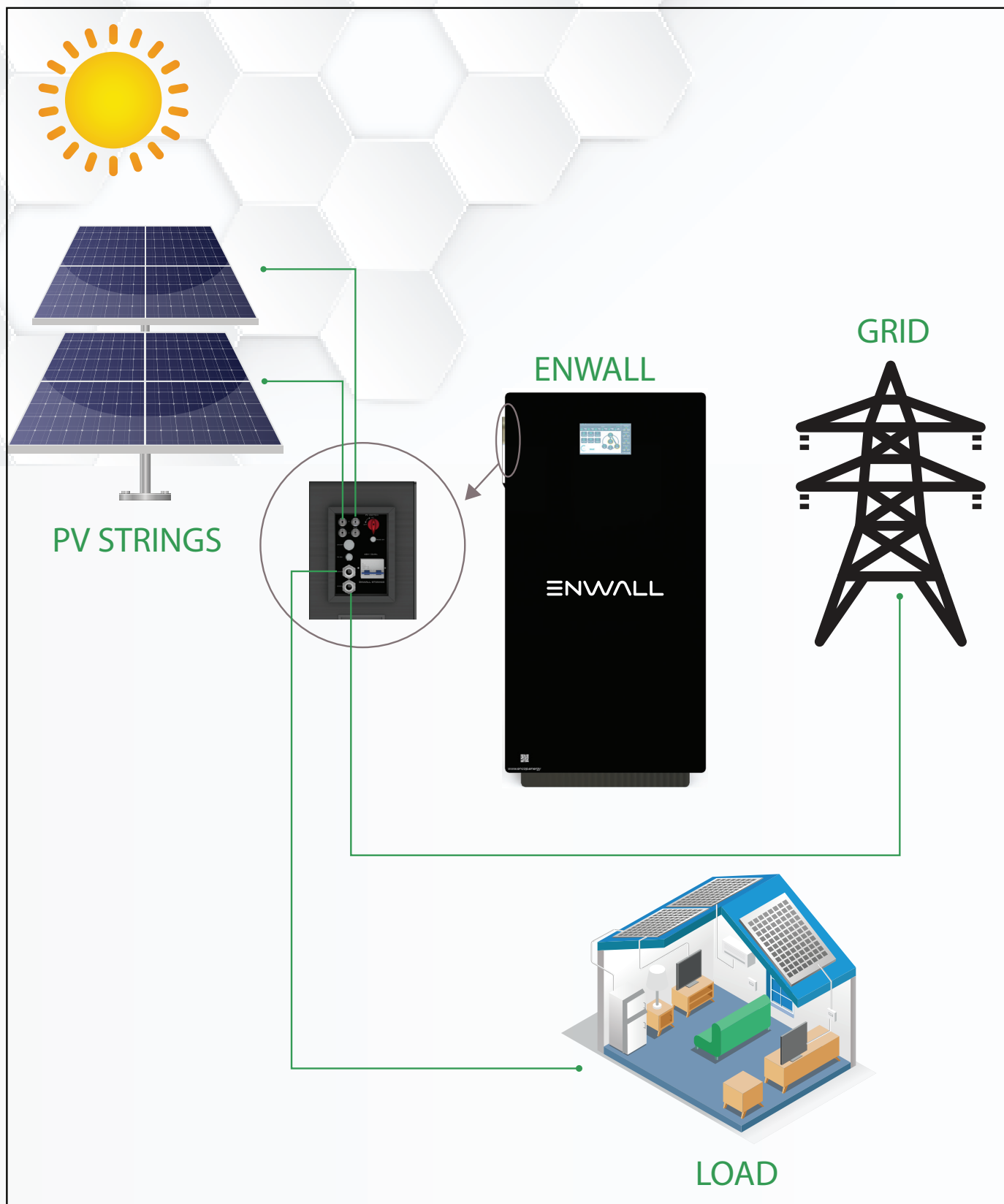


ENWALL LAYOUT:



ENWALL MECHANICAL DIMENSIONS:



**ENWALL ARCHITECTURE:**

**ENWALL SPECIFICATIONS:****BATTERY PERFORMANCE SPECIFICATIONS**

DC Energy	10kWh
Voltage Range	43.2Vdc to 60.8Vdc
DC Voltage (Nominal)	48Vdc
Internal Resistance	< 4 mili Ohms
Technology	Encapsulated Cell
Nominal Cell Voltage	6.4 ~6.6Vdc / Cell (Encapsulated) 1/2 + 0.12V Envelope
Maximum Charge Current	135A
Maximum Discharge Current	135A
Charging Curve	3 Stages / Equalization (CC/CP/VP)
Charging Strategy for Module	Self-adaption to BMS

**PV STRING INPUT DATA**

Max. DC Input Power(W)	6500W
PV Input Voltage(V)	370V (125V~500V)
MPPT Range(V)	150~425V
Full Load DC Voltage Range	300~425V
Start-up Voltage(V)	125V
PV Input Current(A)	26A
Max.PV Isc(A)	34A
No. of MPPT Trackers	2
No. of Strings Per MPPT Tracker	2

**AC OUTPUT DATA**

Rated AC Output and UPS Power(W)	5000 W
Max. AC Output Power(W)	5500 VA
Peak Power(off grid)	2 times of rated power, 10 S
Rated AC Input/Output Current(A)	22.7/21.7A
Max AC Input/Output Current(A)	25/23.9A
AC Output Rated Current(A)	35A
Output Frequency and Voltage	50/60Hz; 220/230Vac (single phase)
Grid Type	Single Phase
Power Factor	0.8 leading to 0.8 lagging
Total Harmonic Distortion (THD)	<3% (of nominal power)
DC current injection	<0.5%LN

**EFFICIENCY**

Max. Efficiency	97.60%
MPPT Efficiency	>99%

**PROTECTION**

Battery Short Circuit Protection	Electronic Switching, Terminal Cut-off
Battery Over/under voltage	Electronic Switching, Terminal Cut-off
Battery Over Current	Electronic Switching, Terminal Cut-off
Battery Over temperature	Electronic Switching, Terminal Cut-off



Integrated Equipment Protection	DC Polarity Reverse Connection Protection, AC Output Over Current Protection AC Output Over Voltage Protection, AC Output Short Circuit Protection, Thermal Protection DC Terminal Insulation Impedance Monitoring, DC Component Monitoring, Ground Fault Current Monitoring Power Network Monitoring, Island Protection Monitoring, Earth Fault Detection, DC Input Switch Over voltage Load Drop Protection, Residual Current (RCD) Detection, Surge protection level
Surge Protection Level	TYPE II(DC),TYPE II(AC)
<b>SMART FEATURES</b>	
OLED Display	Monitor & Configure Module
Communication	WIFI / CANBUS / Bluetooth
Alarm	Buzzer alarm in the event of Over/under-Voltage, Over-Current, Over Temperature
<b>EN-CONNECT SOFTWARE</b>	
Module Monitoring	Total Voltage, Individual Cell Voltages, Current, Temperatures, Instantaneous Power, SOC and Energy Consumed

**ENVIRONMENTAL SPECIFICATIONS**

Cell Operating Temperature	-30°C~ +70°C
Operating Humidity	Non-Condensing
Warehousing	Can be stored at any SOC without affecting cycle life

**MECHANICAL SPECIFICATIONS**

Dimensions (W x H x D) mm	659 x 1267 x 250
Weight (Kg)	155
Module Casing Material	GI Powdered
Installation Style	Wall Mounted